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**PRELIMINARY REPORT ON THE THEME:  
"SUSTAINABLE DEVELOPMENT INDICATORS"**

**Task Managers: France and Tunisia**

## SUSTAINABLE DEVELOPMENT INDICATORS

### Introduction

As tools of communication and information which reflect and characterise static or dynamic situations, these indicators can help in the taking of decisions aimed at sustainable development. They quantify information by grouping large amounts of disparate data, thus making it more directly accessible and meaningful.

They simplify the information in order to highlight what are often rather complex phenomena.

At the United Nations Conference on the Environment and Development, held in Rio de Janeiro in 1992, the need to create indicators of sustainable development was stressed (Agenda 21, chapter 40).

The final aim is to make available a battery of economic, social and environmental indicators which would be harmonised at international level, and which would be capable of showing national efforts towards sustainability (long term ecological and economic management, progress towards social equity).

Indicators making international assessment and comparisons possible have long been used in the economic and social fields. This "tradition" lies behind our reflections. The Gross National Product, the Price Index, the rate of unemployment.....all of these are invaluable tools for decision-takers. Throughout the world, they are used to help assess public policies and play a leading role in the drawing-up of new measures.

More recently, the indicator of human development (IHD), developed by the UNDP has completed the battery of assessment tools along a socio-cultural line.

As yet, however, the environmental field does not have a homogeneous set of indicators to play this key role of policy guidance. Thus, faced with a growing demand for accurate description and assessment of environmental actions, an increasing number of proposals are being made at both international and national level, and numerous experts are striving to make headway on this issue.

The adaptation of Agenda 21 to the Mediterranean basin (Agenda Med 21) which came about within the framework of reflections on sustainable development in the Mediterranean, led within MAP to the setting-up of the Mediterranean Commission on Sustainable Development (MCSD).

The inclusion of indicators of sustainable development amongst the priority subjects chosen by the MCSD for the next two years is in line with the recommendations of Agenda 21 (Chapter 40).

In carrying out this activity, the working groups will draw on the Blue Plan, given its related activities, and on the network of national observatories and similar institutions in order to create a set of indicators of sustainable development (ISD) which will be comparable at national level and can be adapted to subnational levels.

As for the new field of sustainable development, a large number of national and international institutions are showing great interest in the identification of relevant indicators, based in particular on the two foregoing sets. The United Nations' Commission on Sustainable

Development (CSD) recently identified a set of ISDs, and it is essential that the Mediterranean as an eco-region should actively contribute to this effort by adapting the ideas and ensuing results to the Mediterranean context.

**Context:**

Indicators are traditionally used in assessment, monitoring and forecasting, as they concisely reflect an action or situation and the way in which it is evolving.

As the World Resources Institute (WRI) points out, the interpretation of indicators involves a scale of specific values, against which certain aspects of public policy or environmental performance can be measured. It also requires a model or a set of hypotheses which link the indicator to a more complex phenomenon (multi-variable whole). Indicators being created for purposes of public policy should have the corresponding scales of value or reference model attached to them.

According to the OECD, indicators have two main functions:

1) to reduce the number of measurements and parameters which would normally be required in order to accurately reflect a given situation,

2) to simplify the process of informing the user of the results of measurements.

It is possible to represent a given indicator in many different ways, and the choice must be made in terms of the target group. The essential point is to make the information as direct and attractive as possible.

According to the problem under consideration, the user, and availability of data, indicators can be created at different levels. When the aim is to establish a country's position at international level or within the Mediterranean region as a whole, national indicators are required. This raises the question of the geographical aggregation of collected data.

Information as to the quality of a given milieu, for example, is naturally very closely tied in with that specific milieu, and any rapid aggregation (e.g. the average for the whole area) may lead to a loss of information. It is sometimes useful to retain information of a local nature (illustrated on a map), but this means that a number of points have to be selected throughout the whole of the area (quality measurement networks) which are representative of the milieu and the pressures being exerted upon it.

Statistical services have long been using indicators of development, mainly in socio-economic sectors. In 1989 the OECD drew up and calculated a set of indicators for the environment based on the Pressure-State-Response (PSR) methodology, which allows the environmental conditions in its member states to be monitored.

This methodology follows the logic of cause-effect-social response. It strives to link the reasons for environmental change (pressures) to their effect (state), and finally to any ensuing public reaction (response) or actions and policies introduced to face up to these changes. The PSR can be applied to the international, national or local level, and can also be used for sectorial analysis. It has been widely accepted and adopted by international bodies to monitor and assess environmental progress.

The United Nations Commission on Sustainable Development proposes a set of 135 indicators covering Development, the Environment and the Institutions, drawn up according to the DSR methodology (Driving Forces, State, Response), adapted from the framework developed by the OECD and according to the chapters of Agenda 21. These indicators,

defined at macro (national) level, are basically ratios and are not necessarily indicators of Sustainable Development according to the different approaches and multiple definitions.

Moreover, the European Environment Agency (EEA, Copenhagen) has drawn up a broader framework-DPSIR (Driving Forces, Pressure, State, Impact, Response).

Certain institutions such as the WRI, the RIVM, SCOPE, the IFEN, etc. are working on programmes for drawing up indicators of Sustainable Development which would be better able to characterise the sustainable development process, in particular by taking account of any evolution. For the most part these more synthetic and complex indicators have not been through full-scale testing.

Many countries are already using indicators of the environment or of Sustainable Development without necessarily giving any further details, whether this be in their reports on the state of the environment or in national reports on Sustainable Development.

As far as the Mediterranean region is concerned, the CSD indicators should be adapted and tested in close cooperation with the Blue Plan and in liaison with its "indicator" programme (EC/DG XI Life) for the Mediterranean countries. It would also be desirable to use or develop more specifically targeted indicators which would be linked to significant thresholds for Sustainable Development. Moreover, countries' concerns should be borne as closely in mind as possible by following, for example, the MED 21 framework as well as their national strategies on the environment and Sustainable Development.

#### **Scope and coverage of the study:**

##### **Basic indicators**

The identification of basic indicators built up from a common core should put countries in a position to respond to the CSD's request whilst proposing indicators which will allow them to better characterise their own Sustainable Development.

The basic indicators should highlight the development side by using flexibility and derivatives, but they should also be applicable at different geographical levels - from the national to the local, with the accent within the MCSD being placed on the Mediterranean coastline.

These indicators should correspond to the following criteria:

- pertinence
  - reliability
  - timeliness
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- An indicator is pertinent if it corresponds to the requirements of its user: pertinence is defined by political demand at national and international level. It also depends on the way in which data is presented and interpreted.
  - Reliability indicates the degree of confidence or certainty which can be attached to the data. It often depends on temporal and spatial coherence (networks) which can be affected by changes to measuring methods, assessment or monitoring procedures, data sourcing etc....
  - Timeliness corresponds to the brevity of the period between the point when the data is established and the point when the indicators can be calculated and published.

Questions raised by these criteria are related to the speed of data collection, its imposition, the rate at which it is processed, the efficiency of institutional arrangements and the time it takes to publish the data.

In order to draw up and then effectively calculate the indicators, statistical information has to be collected from many institutions and services. The National Observatories or equivalent structures could collect the data from the services involved.

Essential factors for efficient data collection and the drawing up of indicators are the setting up and maintenance of data collection networks, which represent an important part of the National Observatories' activity.

### **Distribution and access**

Indicators make it possible to pass on information on questions related to the environment and Sustainable Development in the form of aggregated and simplified administrative or statistical data.

Just as there are thematic or regional reports on the state of the environment, indicators can also cover cross-the-board issues (health and the environment, agriculture and the environment, etc.).

It must be stressed that the choice of indicators of the environment or of sustainable development is a political one, in that these indicators must dovetail perfectly with the priority areas of the region or countries if the environmental problems are to be tackled seriously.

Circulation of the results in the form of "data sheets" can come about through conventional means as a report containing graphic illustrations, maps and comments, including recommendations for action in the light of the indicator values.

This information can also be accessed through modern means of communication: the creation of a WEB server will make it possible for anyone connected to the Internet to use the information.

### **Uses**

The use of ISDs could result in the drawing up of a periodic report (2 or 3 years) on the way in which problems and policies related to the environment and development are evolving, with a retrospective covering a period of 5 to 10 years by the MCSD, the countries and the regions.

The aim is for decision-makers, both national and local, to put these indicators to practical use, so that their policies can be weighted towards Sustainable Development.

The indicators can be put to various different ends:

1. monitoring environmental situations and development conditions;
2. examining the performance of policies and conventions implemented for environmental protection purposes, and establishing the degree to which environmental concerns have been integrated in economic and development policies.

### 3. assessing efforts towards the sustainability of development.

Numerous national attempts have been made to draw up sets of indicators (Canada, France, Netherlands, United Kingdom...).

At regional or international level indicators are often jointly presented by different countries. This makes comparison possible, which is always useful.

Whilst illustrating environmental trends, indicators may also be used to assess whether or not policies introduced are working well, thus providing implicit guidance towards better individual and collective environmental management practices. When conditions do not improve, the information provided by certain indicators can stimulate efforts to improve policies and to innovate. Thus, indicators can exert a more direct influence on political decision-making.

These indicators also act as tools to aid the secretariats of the Conventions in the follow up and assessment of actions falling within their sphere. They resemble elements of a language shared by experts and decision-makers.

Indicators of sustainable development are used to assess to what degree situations and development trends are in line with the principles of sustainable development. They do not really make it possible to state that certain developments are sustainable, but can expose signs of non-sustainability in certain practices. The concept of sustainability implies the inter-linking of economic, social and environmental factors. Sustainability criteria thus imply that policies must take due account of all these factors in order to assess the survival potential of systems of production, consumption, the environment and the use of natural resources.

Finally, they make it possible to structure the periodic presentation of "The State of the Environment and Sustainable Development" of the Mediterranean basin.

#### **Working method**

It can be seen that the development of indicators of Sustainable Development is an across-the-board task running through all the other thematic working groups. In fact, indicators specific to each theme could actually be drawn up.

The working methods will, therefore, place great importance on:

- the organisation of meetings of thematic experts (a maximum of 5 to 10 experts) throughout the whole process;
- the exchange of experience and cooperation between the main institutions working in this field at national (IFEN, ONEM, OTED, etc.) and international level (CSD, SCOPE, etc.);
- the exchange of experience between countries and if possible joint projects between two nations ( as for example between France and Tunisia to test the CSD indicators in the two countries);
- the organisation of a workshop (early 1998) on the conceptual framework of ISDs in the Mediterranean and the identification of a first set of indicators;
- the organisation of a transversal workshop (early 1999) to draw up the specific indicators;

- exchange with the other thematic working groups.

### **Suggested work schedule**

The final product (June 1999) will comprise a critical assessment and proposals including:

- a summary report on the different international approaches (characteristics and relevance for the Mediterranean) (November 97);
- the definition of the conceptual framework (March 98);
- a standard data sheet for presentation of the indicators (March 98);
- the identification of the basic indicators (June 98);
- as of June 98 the three monthly compilation of data sheets for Mediterranean and national indicators (in cooperation with the countries concerned);
- a list of "desirable" indicators (October 98);
- a guide for the collection of necessary information, circulation and access as well as the use of indicators (January 99);
- a first set of indicators (March 99).